## KEY TO WATER TEST RESULTS for customers of: Clay County Water Lab

(MN Dept. of Health Certification #027-027-417)

## MN DEPARTMENT OF HEALTH STANDARDS FOR DRINKING WATER

Coliform bacteria: Total Coliform Absent Nitrate Nitrogen: <10 mg/L Fluoride: <2.2 mg/L Dissolved Iron: <0.3 mg/L Chloride: 250 mg/L Alkalinity: 100 mg/L

pH: 7.0 is neutral, above 7 is alkaline, under 7 is acidic

Hardness: 0-50 mg/L soft, 51-100 mg/L medium hard, 101-150 mg/L hard

**SYMBOLS:** < Stands for "less than"

>Stands for "greater than"

QNS means that there was an insufficient quantity of sample for test (s)

Each test requires @ 3 oz of sample or 100 millilitres Mg/L stands for milligrams per liter OR PPM (parts per million)

FECAL means that ecoli bacteria were found N/F means that NO ecoli bacteria were found

<u>COLIFORM BACTERIA:</u> Coliform bacteria are present in the intestinal tracts of both animals and humans. Most coliform bacterial do not cause disease by themselves, but their presence indicates a source of outside contamination to water source or distribution system. There is NO ALLOWANCE for ANY Coliform bacteria presence in a water system intended for consumption.

<u>POSITIVE COLIFORM RESULTS:</u> This means that potentially harmful bacteria were found in the sample submitted. **DO NOT USE THIS WATER FOR DRINKING OR FOOD PREPARATION.** The system should be sanitized and then re-tested for Coliforms. (Instructions on how to sanitize a typical well system are provided on the back of this form, or you may choose to have a licensed well driller or plumber sanitize your system.) Any sample that tests positive for Coliform Bacteria will be automatically examined for **FECAL** Coliform and if present, will be indicated on the report form.

<u>NITRATES:</u> Elevated Nitrate levels may indicate the presence of additional contaminates from surface water sources and are a health concern for infant humans under 6 months of age as well as some pregnant women, humans with certain stomach and blood disorders, and young mammals. The condition caused is called methemoglobinemia or "blue baby syndrome". Sources of nitrate contamination are animal and human wastes, nitrogen fertilizers, and rotting vegetation.

The acceptable result for Nitrates is less than 10 mg/L (<10mg/L)

## DISINFECTION OF WELL PROCEDURES (BACTERIA)

## Procedure:

Note: IF YOU HAVE A WATER TREATMENT/CONDITIONING SYSTEM, YOU MUST REFER TO THE OWNERS' MANUAL AND/OR CONTACT YOUR SERVICE REPRESENTATIVE PRIOR TO CHLORINATING YOUR WATER SYSTEM OR DAMAGE TO YOUR WATER CONDITIONING SYSTEM MAY OCCUR.

Mix together - 1 gallon household liquid bleach and 5 gallons of water

Pour down well-head

Start and stop pump several times to mix solution in well

Turn off pump and let stand for 6 hours

Turn pump back on, open ALL faucets (one at a time) and run until you smell bleach (note: water may look very dark)

Let bleach water stand in water lines and tanks for 2 hours

Open all faucets and run water until the taste and odor of bleach is not objectional to you

**Note:** (If avoidable, do not run this bleach water into your septic system or holding tank, let it run outside onto surface of ground, it is not sewage and the bleach may harm the soil microbes in you soil absorption area (drainfield).

After 3-4 days, another water sample should be taken to lab to verify disinfection of well. (Note: This usually works the first time **IF ALL** lines are disinfected, and there is no outside source of contamination, however, some systems have needed repeated treatments)

NOTE: This procedure should be followed for all seasonally used wells when they are first placed back into service each spring.

NOTE: All wells should be tested annually for bacteria and nitrate contamination.